Family Nursing & Home Care

Peripheral Vascular Access Device (Cannulation) Policy (Adults) and Procedures

August 2015

Document Profile

Type i.e. Strategy, Policy, Procedure, Guideline, Protocol	Policy
Title	Cannulation Policy
Category i.e. organisational, clinical, finance	Clinical
Version	1.0
Author	Adapted from HSSD by Carol Rowley-Blackwell
Approval Route, i.e. Policy & Procedure Group, Operational Governance Group	Operational Governance Group
Approved by	Chief Executive Officer – Julie Gafoor
Date approved	13/08/15
Review date	13/08/18

CONTENTS LIST:

1. INTRODUCTION

1.1 Rationale

The practice of Peripheral Vascular Access Device (PVAD) insertion is a multi-disciplinary skill and responsibility. The aim of this policy is to support the standardisation of practice throughout Family Nursing & Home Care [FNHC]. The purpose of this policy is to inform all relevant practitioners of their role and responsibilities in the standardised, safe and effective insertion and ongoing care of PVAD's (Cannulation) and to reduce the incidence of PVAD related infections.

1.2 Scope

This policy applies to all staff involved in the insertion and ongoing care and maintenance of PVADs .

1.3 Roles and Responsibilities

It is the duty of all those who insert and manage PVAD's to understand the risks associated with such devices and be responsible for updating their knowledge and maintaining the highest standards of practice.

1.4 Principles

PVAD's are cannulae inserted into a small vein for therapeutic purposes such as the administration of medications, fluids and/or blood products (McCallum and Higgins 2012). The insertion of peripheral intravenous cannulae is one of the most common invasive procedures performed in hospital, and is becoming increasingly more common in the community, offering a means of access to a patient's vascular system (Nutbeam and Daniels 2010).

Historically, the insertion practice of PVAD's has varied significantly, dependent upon the speciality and experience of the practitioner involved in the care. Variation in the standard of care constitutes a clinical risk and increases the risk of patients suffering complications related to PVAD insertion, such as Healthcare Associated Infections (HAI's). Intravenous cannula related infections are associated with increased morbidity and mortality, prolonged hospitalisation and increased costs (Morris and Tay, 2008).

2. POLICY

This policy identifies both the insertion procedure for PVAD's and the ongoing care management principles that must be adhered to within FNHC.

Practitioners undertaking the insertion and care of PVAD's must have received formal education in the principles of device management and have been deemed competent in this skill (N.B. this may have been achieved during medical/nurse training or as a bespoke cannulation training session). These clinical skills must then be used in conjunction with this policy and procedural guidelines (Royal Marsden Manual, 2011) to ensure best practice principles are adhered to. The title practitioner, used throughout this document, refers to all those staff undertaking cannulation. This includes Nurses and Senior Health Care Assistants who have the support of FNHC and their respective managers in the undertaking of this practice

The insertion of a PVAD is regarded as a minor surgical procedure (Phillips et al 2011) and therefore the utmost care and adherence to strict infection prevention and control (IPaC) procedures is paramount. Thorough hand decontamination is the single most effective method in reducing HAI's and must be practiced prior to the insertion or manipulation of a PVAD.

Skin preparation prior to PVAD insertion has been shown to be most effective utilising 2% chlorhexidine in 70% isopropyl alcohol (ChloraPrep), (Scales 2009). It is therefore stipulated that ChloraPrep must be used prior to PVAD insertion.

This policy is limited to adult peripheral vascular device insertion and therefore the recommended use of ChloraPrep is for this client group only and it is stipulated that the small vials of ChloraPrep (Sepp 0.67ml applicator) are utilised for skin preparation for PVAD insertion. The larger Frepp applicator (1.5ml) should be used prior to arterial line insertion or blood culture sampling and the 3ml applicator should be used for central line or midline insertions. ChloraPrep must be used in conjunction with the manufacturers' recommendations, i.e. be applied in the correct method according to the product type used and allowed to dry for 30 seconds prior to skin puncture.

Whenever accessing the PVAD, the non-return, posiflow bungs must be decontaminated using Alcoholic 2% Chlorhexidine Clinell wipes. These must be used in accordance with manufacturers' instructions ensuring that the sterilised bung is allowed to dry for 30 seconds following application.

3. CORPORATE PROCEDURE

Adherence to the clinical guidelines set out in the Royal Marsden Manual (2011) and the Collaborative Intravenous Nursing Service (2012) guidelines will be adopted by all practitioners undertaking the procedure of peripheral access device insertion.

http://www.rmmonline.co.uk/rmm8/procedure/18/ss20?q=%2B(peripheral%20cannulation%20insertion)%20%2BcurrentVersion%3Atrue

http://www.mccn.nhs.uk/fileuploads/File/CINS Guidelines 2012-2014 v10.pdf

Following clinical trials in 2013, HSSD have established the use of needle-safe cannula throughout General and Acute Services, this has also followed through into the community and FNHC. This mandate is in line with European directives for the prevention of needle stick injuries (European Biosafety Network 2011).

DOCUMENTATION PROCEDURE

A Care Bundle should be used for any patient with a cannula for a period of time estimated to be greater than 24 hours. Where a care bundle is not required the documentation of the insertion and removal of the patient's PVAD must be recorded in the patient's case notes. Should any of these patients subsequently require admission as an In-Patient a Care Bundle (Appendix 1) should be completed retrospectively.

If a patient is discharged from hospital or any other in-patient setting with a cannula in situ then the care bundle should follow the patient and be kept in the patient's record. The following stages should be undertaken in utilising the care bundle;

- Affix a patient Addressograph to the Care Bundle or complete the patient's demographic details
- Complete the clinical area details and practitioner identifier details
- Complete **Part 1** of the Care Bundle retrospectively (as soon as possible) following insertion of the PVAD and sign each metric

- **Part 2** must be completed on a daily basis – further observation check boxes are available on the back of the Care Bundle
- **Part 3** must be completed on PVAD removal
- The Peripheral Access Care Bundle must then be filed in the patient's nursing notes

In line with the Cochrane Report (Webster et al 2013) PVAD's should be checked and condition documented on a daily basis. If there are no signs of phlebitis and the line is patent they can remain in place as long as clinically indicated. Daily consideration as to whether the line is required is essential. If a practitioner is unsure as to whether a PVAD should be removed it should be discussed with the Team Leader.

4. DEVELOPMENT AND CONSULTATION PROCESS

An outline of who has been involved in developing the policy / guidance procedure including FNHC committees, service users and agencies.

Consultation Schedule

Name and Title of Individual	Date Consulted
Tia Hall Operational Lead DN	May 20th 2015
Elspeth Snowie Clinical Effectiveness Lead	May 20th 2015
Jane Le Ruez-Lane Patient Safety Lead	May 20th 2015
Barbara Bell Governance Operational Lead	May 20th 2014
Jean Hinks Operational Lead Home Care	May 20th 2014
Clare Stewart Team Leader Rapid Response Team	May 20th 2015
Julia foley District Nursing Sister	May 20th 2015
Jim Wilkinson Charge Nurse Team Leader	May 20th 2015
Ruth Taylor Deputy District Nurse Sister	May 20th 2015
Louise Hamilton Rapid Response Team	May 20th 2015

5. REFERENCE DOCUMENTS

European Biosafety Network (2011) *Prevention of Sharps Injuries in the Hospital and Health Care Sector, Implementation Guidance for the EU Framework Agreement, Council Directive and Associated National Legislation*. Available online at

http://www.europeanbiosafetynetwork.eu/EU%20Sharps%20Injuries%20Implementation%20Guidance.pdf

http://hssnet/Registered%20Documents/Policies/General%20Policies/HSS-PP-CG-0370-02%20PVAD%20Policy.pdf

McCallum, L and Higgins, D. (2012) Care of peripheral venous cannula sites, Nursing Times, Vol 108 (34/35) pp 12-15.

Morris, W. and Tay, MH. (2008) Strategies for preventing peripheral intravenous cannulation infection, *British Journal of Nursing* (IV Therapy Supplement), Vol 17 (9).

Nutbeam, T and Daniels, R (2010) *ABC of Practical Procedures*. BMJ Books. Blackwell Publishing Ltd.

Phillips, S., Collins, M. and Dougherty, L. (2011) *Essential Skills for Nurses. Venepuncture and Cannulation*: Wiley-Blackwell.

Scales, K. (2009) Correct use of Chlorhexidine in Intravenous Practice, *Nursing Standard*, Vol 24 (8), pp 41-46.

The Royal Marsden, (2011) *The Royal Marsden Hospital Manual of Clinical Nursing Procedures,* 8th Edition, Intranet Version (Online) January 2013. http://www.rmmonline.co.uk/home.html

Webster J, Osborne S, Rickard CM, New K. (2013) Clinically indicated replacement versus routine replacement of peripheral venous catheters. *Cochrane Database of Systematic Reviews*, Issue 4.

Appendix 1

Please Complete or Affix Addressograph	PVAD	States of Jersey
Surname:	Name / Designation:	
Forename:	Signature:	
Date of Birth:	Date and Time:	
URN:	Ward / Area:	

PERIPHERAL VASCULAR ACCESS DEVICE (PVAD) CARE BUNDLE - ADULT

PART 1 — FOR IN-PATIENT USE ONLY (PVAD's likely to stay in for >24 hours)

PVAD Sites:

Indicate: 1 2

Left ☐ ☐
Right ☐ ☐
Hand ☐ ☐
Forearm ☐ ☐
Foot ☐ ☐
Other ☐

PVAD size:

Indicate: 1 2

24G	☐	☐	(Yellow) - Paediatric
22G	☐	☐	(Blue)
20G	☐	☐	(Pink)
18G	☐	☐	(Green)
16G	☐	☐	(Grey)
14G	☐	☐	(Orange)

PVAD insertion - safety	Tick box on completion		Signature	
Cannula sited by ambulance personnel? YES ☐ NO ☐	PVAD 1	PVAD 2	1	2
2% Chlorhexidine / 70 % Isopropyl alcohol used for skin preparation				
Aseptic technique practiced				
Semi-permeable dressing applied with date documented on it				
Peripheral line flushed to ensure patency				

Transferred to ward 1:- | Transferred to ward 2:-

Ensure Hand Hygiene prior to accessing device. Clean hub for at least 15 seconds with 2% Chlorhexidine wipe

PART 2 — OBSERVATIONS OF PVAD - DAILY CHECKS

Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						

V.I.P. Score (Visual Infusion Phlebitis Score)

I.V. site appears healthy	0	No signs of phlebitis ☐ OBSERVE CANNULA
ONE of the following is evident: • Slight pain near I.V. site or slight redness near I.V. site	1	Possible first signs of phlebitis ☐ OBSERVE CANNULA
TWO of the following are evident: • Pain near I.V. site • Erythema • Swelling	2	Early stage of phlebitis ☐ RESITE CANNULA
ALL of the following are evident: • Pain along path of cannula • Erythema • Induration	3	Medium stage of phlebitis ☐ RESITE CANNULA ☐ CONSIDER TREATMENT
ALL of the following are evident: • Pain along path of cannula • Erythema • Induration • Palpable venous cord	4	Advanced stage of phlebitis or start of thrombophlebitis ☐ RESITE CANNULA ☐ CONSIDER TREATMENT
ALL of the following are evident: • Pain along path of cannula • Erythema • Induration • Palpable venous cord • Pyrexia	5	Advanced stage of thrombophlebitis ☐ INITIATE TREATMENT ☐ RESITE CANNULA

PART 3 — PVAD Removal - Remove if V.I.P. score 2 or above or is no longer needed

PVAD 1	Date:	Removed by:
PVAD 2	Date:	Removed by:

 Reference Number Here

PART 2 - Continued **OBSERVATIONS OF PVAD - DAILY CHECKS**

Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						
Date:	Required?	Dressing	V.I.P. score	Flush	Action	Signature
PVAD 1						
PVAD 2						